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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,048	03/11/2004	Ross Stenfort	ADAPP271	8593

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EXAMINER
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RAHMAN, FAHMIDA

ART UNIT	PAPER NUMBER
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2116

DATE MAILED: 06/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/800,048

Applicant(s)

STENFORT ET AL.

Examiner

Fahmida Rahman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. Claims 1-20 are pending.

**Claim Rejections - 35 USC § 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3, 5, 6, 9, 11-14, 18, 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Umesh et al (US Patent Application Publication 2004/0137952).

For claim 1, Umesh et al teach the following limitations:

An apparatus for controlling an alignment signal transmission in an electronic communication process (the system adjusts the width of the directional beam pattern according to antenna weight. Thus, the system controls the alignment of directional beam), comprising: a counter (13 comprises a timer. Timer is a counter since it counts time) configured to sequentially modify a count value in accordance with an associated clock signal (timers are synchronized with clock signal);  
a storage cell configured to receive and store an alignment trigger value (16);

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a comparator (14) connected to receive the count value as an input from the counter (Fig 5) and the alignment trigger value as an input from the storage cell (16), the comparator configured to compare the input from the counter to the input from the storage cell (Fig 5), the comparator further configured to send an output signal from an output port upon equivalence of the input from the counter and the input from the storage cell (output of 14 is the input to 15); and alignment circuitry (combination of 11, 12 and 15) connected to receive the output signal from the comparator (15 receives output from 14), the alignment circuitry configured to generate and transmit an alignment signal (the directional beam generated according to antenna weight can be thought as an alignment signal, since it is used to align base station with mobile station) through an initiator transceiver (base station) to a target transceiver (mobile station) in response to receipt of the output signal from the comparator (the output of 14 is used to generate appropriate antenna weight that is used to adjust directional beam).

For claim 3, counter is reset when transceiver receives an up signal. The reset link can be thought as the link comprising output of comparator forming adjusted directional beam to the mobile station and the receipt of up signal from the mobile station.

For claim 5, the timer is in base station or the initiator transceiver. Thus, timer is associated with a clock, which is also associated with the initiator transceiver.

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For claim 6, the communication between base station and mobile station can have a number of transmissions.

For claim 9, Umesh et al teach the following limitations:

A method for controlling an alignment signal transmission in an electronic communication process (the system adjusts the width of the directional beam pattern according to antenna weight. Thus, the system controls the alignment of directional beam), comprising: operating a counter (13 comprises a timer. Timer is a counter since it counts time) configured to sequentially modify a count value in accordance with an associated clock signal (timers are synchronized with clock signal);

Selecting an alignment trigger value (16); transmitting an alignment signal (the directional beam generated according to antenna weight can be thought as an alignment signal, since it is used to align base station with mobile station) through an initiator transceiver (base station) to a target transceiver (mobile station) in place of transmission unit (mobile and base station can share information between them through packet transmission, which is different from directional beam) when count value equals the alignment trigger value (check S304 block. The count value is compared against a threshold. If count value equals threshold, then S305 path is followed, which narrows the directional beam. The directional beam is an alignment signal, since it aligns MS with BS. Therefore, alignment signal is transmitted when count value equals trigger value)

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For claim 11, trigger value can be any value.

For claims 12 and 13, 14 is the comparator and output of comparator determines when count value equals trigger value.

For claim 14, counter is reset when transceiver receives an up signal. The reset link can be thought as the link comprising output of comparator forming adjusted directional beam to the mobile station and the receipt of up signal from the mobile station.

For claim 18, Umesh et al teach the following limitations:

A computer readable media containing program for controlling an alignment signal transmission in an electronic communication process (the system adjusts the width of the directional beam pattern according to antenna weight. Thus, the system controls the alignment of directional beam), comprising: programming instructions for operating a counter (13 comprises a timer. Timer is a counter since it counts time) configured to sequentially modify a count value in accordance with an associated clock signal (timers are synchronized with clock signal); programming instructions for selecting an alignment trigger value (16); programming instructions for transmitting an alignment signal (the directional beam generated according to antenna weight can be thought as an alignment signal, since it is used to align base station with mobile station) through an initiator transceiver (base station) to a target transceiver (mobile station) in place of transmission unit (mobile and base station can share information between them through

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packet transmission, which is different from directional beam) when count value equals the alignment trigger value (check S304 block. The count value is compared against a threshold. If count value equals threshold, then S305 path is followed, which narrows the directional beam. The directional beam is an alignment signal, since it aligns MS with BS. Therefore, alignment signal is transmitted when count value equals trigger value)

For claim 20, trigger value can be any value.

### **Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 10, 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Umesh et al (US Patent Application Publication 2004/0137952)

For claims 2, 10, 19, Umesh et al do not explicitly mention that the threshold can be set through user interface. Examiner takes an official notice that setting threshold through user interface is well known in the art. One ordinary skill in the art would be motivated to change the system of Umesh et al so that trigger value can be set through user interface, since that provide the flexibility of setting the threshold.

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Claims 4 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Umesh et al (US Patent Application Publication 2004/0137952), in view of Martin et al (US Patent Application Publication 2005/0089012).

Umesh et al do not teach any delay circuit to compensate latency. Martin et al teach delay circuit to compensate latency ([0046] of page 4).

It would have been obvious for one ordinary skill in the art at the time the invention was made to combine Umesh et al and Martin et al. One ordinary skill in the art would have been motivated to compensate latency by including a delay circuit, since that would ensure accuracy.

Claims 7, 8, 16, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Umesh et al (US Patent Application Publication 2004/0137952), in view of AAPA.

For claims 7 and 16, Umesh et al do not explicitly mention that the communication process is performed in accordance to SAS or SATA protocol. Examiner takes an official notice that SAS and SATA protocol is well known in the art. One ordinary skill in the art would be motivated to implement the system of Umesh et al in accordance to SAS or SATA, since SCSI and AT devices allows a number of peripheral devices to be attached. About dword and ALIGN primitive, applicant admits that these are requirements of SAA/SATA (lines 12-14 of page 8).



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For claims 8 and 17, Umesh et al do not explicitly mention that the transceivers are defined as PHY. Examiner takes an official notice that transceiver defined as PHY is well known in the art. One ordinary skill in the art would be motivated to define transceiver as PHY, since SAS/SATA is compatible with phy.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fahmida Rahman whose telephone number is 571-272-8159. The examiner can normally be reached on Monday through Friday 8:30 - 5:30.

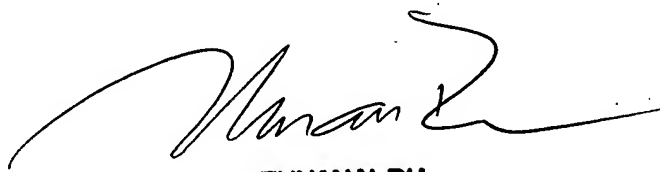
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne can be reached on 571-272-3670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Fahmida Rahman  
Examiner  
Art Unit 2116

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A handwritten signature in black ink, appearing to read 'Thuan N. Du', with a long horizontal flourish extending to the right.

**THUAN N. DU**  
**PRIMARY EXAMINER**